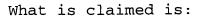
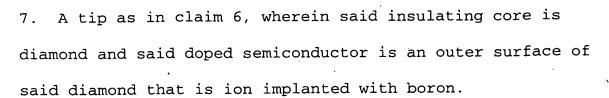
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- 1. A tip having a dissipative material for use in wire bonding machines for connecting leads on integrated circuit bonding pads, wherein said dissipative material has a resistance low enough to prevent a discharge of charge to a device being bonded and high enough to avoid current flow large enough to demage said device being bonded.
- 2. A tip as in claim 1, having a resistance in the range of 10^5 to 10^{12} ohms.
- 3. A tip as in claim 1, having a high enough stiffness to resist bending when hot and a high enough abrasiveness so as to function for at least two uses.
- 4. A tip as in claim 1, wherein said material is an extrinsic semiconducting material which has dopant atoms in the appropriate concentration and valence states to produce said resistance.
- 5. A tip as in claim 4 wherein said material comprises a polycrystalline silicon carbide uniformly doped with boron.
- 6. A tip as in claim 1 wherein said dissipative material comprises a doped semiconductor formed on an insulating core.

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- 8. A tip as in claim 1 wherein said material is a doped semiconductor formed on a conducting core.
- 9. A tip as in claim 8, wherein said conductor is cobalt bonded tungsten carbide; and said doped semiconductor is titanium nitride carbide.
- 10. A dissipative ceramic for use in capillary wedge-type wire bonding machines for connecting leads on integrated circuit bonding pads, wherein said dissipative ceramic is electrically dissipative.
- 11. The dissipative ceramic of Claim 10, wherein said electrically dissipative ceramic comprises alumina (${\rm Al}_2{\rm O}_3$).
- 12. The dissipative ceramic of Claim 10, comprising zirconia (ZrO_2) .
- 13. The dissipative ceramic of Claim 10, comprising alumina (Al_2O_3) and zirconia (ZrO_2).
- 14. The dissipative ceramic of Claim 13, wherein the range of alumina is from 15% to 85% and the range of zirconia is from 15% to 85%.
- 15. The dissipative ceramic of Claim 13, having 40 percent alumina and 60 percent zirconia with other additives.

- 16. A dissipative ceramic comprising aluminum oxide (A_2O_3) and zirconium oxide (ZrO_2) .
- 17. The dissipative ceramic of Claim 16, wherein the range of aluminum oxide is from 15% to 85% and the range of zirconium oxide is from 15% to 85%.
- 18. The dissipative ceramic of Claim 16, having of about 40 percent aluminum oxide and about 60 percent zirconium with other additives.

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